THE FARMING WORLD.

KANSAS CHINCH BUGS.

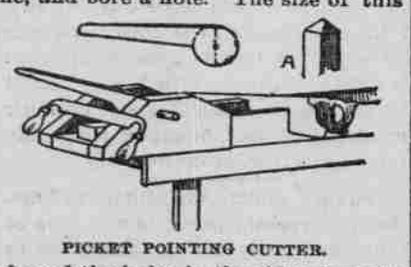
A Simple and Inexpensive Way of Fighting the Pest.

A Kansas agricultural correspondent says that he has just saved 65 acres of splendid corn from the ravages of the chinch bug by a very simple and inexpensive expedient. On the east of his cornfield, and separated from it by a 16-foot lane, was a wheat field of 46 acres. Two or three days before cutting he mixed salt and coal oil in a vessel, putting from one-half pint to one of coal oil to one-half bushel of salt. He then made a line with this salt the whole width of the cornfield (90 rods) through the center of the 16-foot lane. The line of salt was about 3 inches wide at the base. He then bored holes with a post auger about 3 rods apart, to a depth of about 8 inches or a foot. The top of each hole was rimmed with a knife leaving the mouth of the hole funnel-shaped and smooth. As soon as the wheat was cut, about a quart of water was poured into each hole, and topped with a small quantity of coal oil. The holes were on the side next to the wheat field, and close to the salt line. As soon as the bugs meet the salt line they follow it each way until they come to the holes, into which they tumble by the thousand. As the successful experimenter with this simple trap describes it: "They don't crawl in the hole, but as soon as they strike the smooth surface at the top they lose their first hold and roll over; and as there is a constant pressure from the enormous line toward the hole, they look like wheat going into a hopper as they pour over the brink." A boy should be in attendance on the line, to dip out the dead bugs before the hole becomes too full, and to replenish the water and coal oil in the holes when necessary. A little coal oil should be poured on the line once a day, and the line should be remade after each rain. The mouth of the hole should be kept smooth. If it is dry and cracked, a handful of dust should be sprinkled around the edges occasionally. The bugs cannot cling to it, and tumble in as soon as they touch it.

POINTING PICKETS.

A Homemade Machine Which Does the Work to Perfection.

I once had a job of picket-fence making that required over 5,000 pickets. Our stuff was 1½ by 1½ and a nice point was wanted, as on A shown in the cut. Carpenters worked a whole day marking and trying to cut them with chisels, drawing-knife, pocket jackknife, etc., but those ways were all too slow. I then made the machine shown in the cut. With this machine two men could cut and point over 1,000 pickets a day, true and even. The machine is made in the form of a wooden miter-box. Take a piece of 2-inch plank 4 inches wide and about 4½ feet long for the bottom. Take two pieces of plank 18 inches long and 8 inches wide for the sides. Set the bevel at 45 degrees and mark the two side pieces; then saw them, being very careful to saw exactly on the line, as the drawing-knife is to work against these ends, and they should be cut very smooth and true. The upper corners of the other ends of the side pieces are sawed off for neatness. Spike these side pieces to the bottom, then nail inch boards 5 inches wide for the remainder of the sides where the saw works. For the lever use plank 18 inches long and work it out as shown in the cut. The large end is a 6-inch circle, and should be cut out or sawed perfectly true and smooth. Make a mark ⅛ inch above the center, as shown on the dotted line, and bore a hole. The size of this



PICKET POINTING CUTTER.

hole and the holes in the sides depends on the size of iron you are going to use for a pin. If your pickets are 1½ inches square, the holes in the sides must be 4½ inches from the bottom of the box. Tack a little block ⅛ inch thick on the bottom to butt the picket against, then measure from this block the length you want the pickets and saw down through the boards; then fasten the whole thing on to a work bench. One man uses the knife and lever and another does the sawing and turns the pickets when the lever is raised. Four thrusts of the lever and four jerks of the knife point a picket. The saw should always be left in and the picket kept right up against it until the pointing is done. The machine can be made for any sized square pickets, or for flat pickets, and can be made for any bevel desired.—Farm and Home.

Forage Crops for Ensilage.

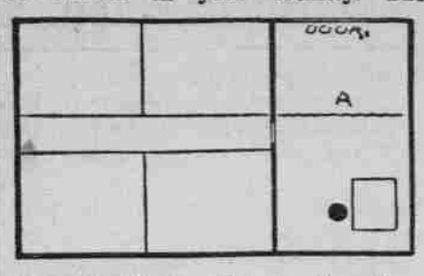
All the protein plants may be made into ensilage. The Maine station in its experiments found that oats, peas and clover gave the best results if from sixty to seventy-five pounds of water were sprinkled over each ton as it was put in the silo. The ensilage fermented properly, and but little molding resulted from this treatment.

A SLOP barrel and a feed box on wheels lightens the labor of caring for the pigs.

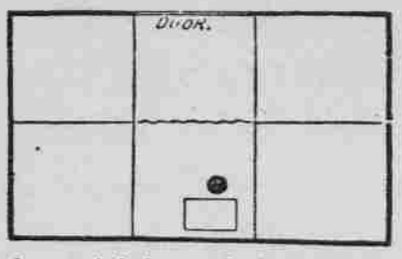
SMALL HOG HOUSE.

In Most Places One Can Be Built for One Hundred Dollars.

A reader wants a plan for a hog house where he can keep four brood sows and fatten twenty to thirty young hogs in fall and winter. He wants to cook all the food in it and keep the corn in the second story. Also he says: "I want to be able to heat the water here for butchering time and have the fire safe." Such a house may be built for a very little money, $100 to $140, according to price of lumber in your locality. The



cheapest will do. This in New England will cost $16 to $18 per 1,000; in Iowa not over $8 to $10. First dig trenches below frost depth and lay walls for the sills 16x24 and plan for a plank floor 1 foot to 18 inches above the ground. Have the first story only high enough to clear a man's head, as it is warmer in winter. In the northwest corner have a chimney and food cooker, which will also heat the water. Here is a room 8x16 where the cooking, butchering and cutting up of meats may be done. When five pens are needed a movable partition may be put in at A, making another. Over this should be a large trap door in the second floor through which ropes and blocks may be let down from the rafters to raise the pigs when dressed. Thus the water will not need



to be carried far, and the work may proceed even if the day be stormy or severely cold.

Another plan, better because more roomy, but not so easily heated at farrowing time, is the above, the workroom being in the center of the building. This has the further advantage of permitting the operator to feed direct from the workroom. Such a place will be found convenient to do many odd farm jobs like painting, oiling harness, washing wagons, etc. The far end of the workroom has a rolling door large enough to run in a wagon. —Farm Journal.

CHICKEN CHOLERA.

When Fowls Are Properly Handled This Disease Rarely Appears.

We have no confidence in remedies for chicken cholera, and believe the prevention is the only thing that can be done. When cholera breaks out among the fowls the first thing to be done is to separate the sick from the well fowls. At once give a change of food, which should be of a nourishing character. Many writers believe in giving iron in some form. The old method was to put rusty nails in the drinking water. English poultrymen use what is known a "Douglas Mixture." This can be made by putting eight ounces of sulphate of iron (also called copperas or green vitriol) into a jug (never use a metallic vessel) with two gallons of water, adding one ounce of sulphurie acid (oil of vitriol). The ingredients can be obtained of any druggist. This medicine is to be put in the drinking water in the proportion of a teaspoonful to a pint, and is found to be a useful tonic. As soon as the disease breaks out give this to the sick fowls, and also to the well ones to help them to resist the disease.

One writer says that he made a saturated solution of alum, and whenever a a bird was attacked gave it two or three teaspoonfuls, repeating the dose next day. He mixed their feed, Indian meal, with alum water for a week. After adopting that course he lost no fowls. Others advocate cayenne pepper, gunpowder and turpentine, feeding a little every day for a week. Fowls that are well fed, well housed and well kept in a dry place will seldom have cholera. In fact we do not know that they ever have it when properly handled.—Rural Life.

Tonic for Sick Animals.

As a rule, animals that are well cared for, fed properly, and watered regularly, need no medicine of any kind to preserve them in good health. The most frequent cause of ill health of farm animals is wrong or irregular feeding, either wrong food or too much is given, and watering is done at improper times. A good tonic is made of equal parts of ground ginger, gentian and sulphate of iron mixed, of which two teaspoonfuls may be given daily in a bran mash, three times. Bran mash is an excellent, mild and safe laxative.—Rural World.

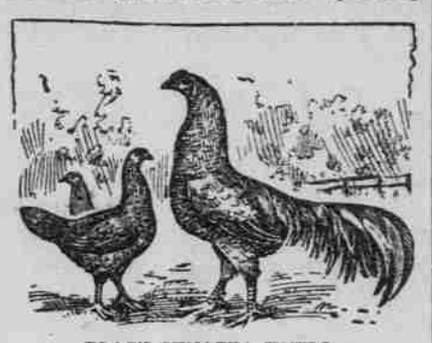
OFFER the hogs clear, cool water at all times in hot weather. It aids digestion and increases their contentment; besides, it is the principal stay in maintaining good health. Avoid surface water.

AGRICULTURAL HINTS.

BLACK SUMATRA FOWLS.

Their Beauty So Great That It Overshadows Their Utility.

One of the rare and most beautiful fowls in this country is the Black Sumatra. Rare breeds run the risk of becoming more rare each year of their existence, because continued close inbreeding is likely to be followed even to the verge of extinction, if happily it does not go beyond the verge and lead to destruction. The more breeders the better the opportunities of obtaining fresh blood, and the better the chances of maintaining the vigor of the breed. It is well, however, to remember that even closely related fowls, if bred in widely separated and very dissimilar places, surrounded by a very



BLACK SUMATRA FOWLS.

different environment, when brought together have something of the effect of a union of unrelated fowls. Environment seems to have a modifying power upon their blood, and to obviate some of the ills of inbreeding. The Black Sumatra is suffering somewhat from the effects that are common to rare breeds. Its size is hardly what its admirers could wish it to be, and hardly, it seems to me, what it was ten years ago. It is now a small fowl, and yet within ten years I have seen birds of this breed that were of a good size, and, owing to their plumage, looked really large. It is also possible that its constitution would not be injured by an outcross with a large, vigorous, short-legged Black Game, breeding out, of course, the antagonistic characteristics which such a cross might introduce. The beauty of the fowl warrants a determined effort on the part of its admirers to make it all that it is capable of becoming. The plumage is a solid black, as lustrous as any color can be, shining and shimmering in the sunlight. The tail of the cock is long, full and carried rather low, the beautiful sickles and abundant coverts almost sweeping the ground. The comb is triple, not as perfect as the pea comb, and might be improved by careful selection. The legs are rather short and, as they ought to be, black in colar. The outlines of the fowl are graceful in the extreme. One peculiarity of this breed, which is possessed by some pheasants, but which I do not recollect as being possessed by other fowls, is the number of spurs the cock has. In nearly all of our domestic fowls a single spur upon each shank serves the cock as a weapon of offense and defense, but nature has provided more liberally for the Sumatra, the cock frequently having two spurs upon each leg, and sometimes three. Some have but one on each leg, and the extra number is of no practical or ornamental value for a domesticated fowl. Many have argued from this fact and from the peculiarly long and some what horizontally carried tail that the Sumatra is descended from the pheasant, but while pheasants and domestic fowls do sometimes produce hybrid offspring, I believe there is no recorded instance where such offspring has been fertile. Every one has proved to be sterile, incapable of breeding with either parent race, and of course would be incapable of breeding with another hybrid of like parentage. Hybrids are sometimes fertile when bred with either parent, but when bred *inter se* are almost invariably sterile. So there is no good reason for supposing that the Sumatra is of pheasant origin. The Sumatra is a plump fowl, and though small must make a toothsome bit of poultry. It has the reputation of being an excellent layer of fair-sized white eggs. But it is not kept so much for its practical as for its ornamental qualities. It illustrates very well the difficulty of accurately classifying fowls into practical and ornamental, for all practical fowls are more or less ornamental, and all ornamental fowls are more or less practical. There is no breed or variety of domestic fowls that has not both utility and beauty, and classification upon such a principle can be made only as utility or beauty seems to be the paramount quality, and sometimes these elements seem so evenly balanced that one is in doubt to which class to assign the fowl. In the case of the Black Sumatra, however, the beauty of the fowl is so great that it fairly overshadows its utility, and one does not hesitate in classifying it as an ornamental fowl.—H. S. Babcock, in Orange Judd Farmer.

Bulk Essential to Digestion.

No animal will thrive if fed entirely on concentrated food. A certain amount of bulk is essential to proper digestion. This is the real value of fodder. But too much bulk is as injurious as too little. Quality and quantity must both be provided for if animals are to retain their health and give the best returns.

GROWTH OF THE HOG.

It Is the Good Feeder That Gets the Best Price for His Stock.

To get a quick growth on a pig, first get the right kind of stock, then feed plenty of various kinds of food and give a good, roomy pen. Some hog raisers have the best stock obtainable, but they do not succeed in getting them as large at a certain age as others. The most of the hogs that are raised in our country have enough good blood in them to make a fast growth if properly cared for, but we all have so much pushing work on the farm that we neglect our hogs more than anything else on the place. If we expect good results we must do our part, and when we do this we will be profited by it. We often notice in a litter of pigs one or two small ones and we generally know why they are smaller than the others—because they do not get their share of milk from the dam. When we see a pig that is getting behind the rest we should manage some way to feed it and keep it growing right along, for just as it becomes stunted we will find it a poor feeder. It never will grow as fast as the others. This is why some breeders have an uneven lot of pigs. After the pigs are weaned, and we begin to feed them, we will find the larger ones crowding the smaller ones away from the trough. A good idea would be to take all the smaller ones and put them by themselves and give them all they can eat of various kinds of food, such as shipstuff, bran, corn meal, whole wheat and an occasional feed of oil meal. You cannot get a quick growth on a pig with corn. They soon get tired of it, become feverish, and begin to root in the ground for something cooling to their scorched stomachs. The pig that has a good range will always do better than those shut up in small pens, no matter how you feed them. Exercise is as essential as good feed in order to produce a fast growth. Do not shut little pigs in a tight pen and confine them to corn if you want to hurry them into market. The cheapest way to raise hogs is the quickest way.—R. S. Fisher, in Farm and Home.

STABLE MANAGEMENT.

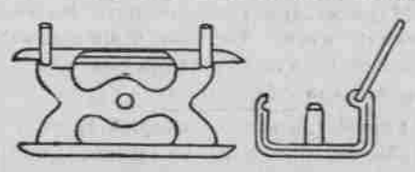
The Best of All Treatment Is to Make the Horses Comfortable.

In the one word "comfort" is included all of the best in stable management, said the writer of an article in the Edinburgh Veterinary Review many years ago. His remark will always remain true. Horses, like men, require to be made comfortable, and in providing that they shall be so we are not only doing them humanitarian justice, but at the same time promoting their health and rendering them fit for the work they have to perform. The space assigned them should be ample, the atmosphere pure and of equable temperature and the light abundant. The stable should be dry and the bedding clean. All that conduces to the comfort of man should be theirs in kind in the way that suits them best as lower animals. The horse is the most delicate of the higher quadrupeds in the choice of food and he should be dieted accordingly. Anything may be good enough for some animals, but not for a horse. He delights in sound corn, abhors mildewed hay and stale mashes, as well as dirty mangers from which to eat. Needless to say the water he drinks should be pure and sweet. He should have his meals also as regularly as the most exacting father of a family. His clothing should be changed with the seasons—heavy in winter, light in summer. A good horse, well treated, will repay attention in health, good spirits and long life. The best of all treatment is to make him always comfortable.—London Live Stock Journal.

THE HORSE'S HARNESS.

How to Make a Labor-Saving Buckle for Stiff Straps.

A leather strap is sometimes so thick and stiff that it cannot easily be bent through the loops and over the tongues of an ordinary buckle. The cut shows an easily made buckle to use where such straps are in daily use. A pin



rising from the center of the metal back, to which it is rigidly secured, passes through perforations in each of the two pieces of leather, and then a "keeper" hinged to one edge of the buckle and consisting of a square skeleton of wire is brought down over them. The keeper fits into a groove in the further upright side of the buckle, which has spring enough to allow this to be done easily and also to retain the keeper in place. The inventor thinks that this device would be a convenient one for joining a third line to double lines when another horse is to be used beside a double team. A fly net would not be likely to catch on this buckle so quickly as on the old style.—N. S. Keppel, in Farm and Home.

BEES may be kept in a prosperous condition the entire season without a queen, but must be supplied with brood from other sources.

IF bees are fixed up in good frame hives in good shape, very little experience is needed to obtain good results.

PERSONAL AND IMPERSONAL.

—Attorney-General Judson Harmon said to a Cincinnati reporter: "I have found out why the Cincinnati man generally wins. It is because all the other Ohio men, women and children stand up for and encourage him. My experience is that politics doesn't make any difference when it comes to congratulations."

—Gen. W. H. Jackson, of Nashville, is the owner of the letter in which, August 12, 1788, Andrew Jackson challenged Col. Waighstill Avery to fight a duel, which was prevented through the offices of common friends. The two men had quarreled over a lawsuit in which they had been engaged as counsel on opposite sides.

—Galen Clark, who in 1857 discovered the big trees near the Yosemite valley, is still guardian of that valley. When he left New Hampshire in 1853 he did not expect to live a year. But in California he spent his time hunting and fishing, bareheaded and barefooted, and to-day he is as hale and vigorous a man of eighty as one can encounter anywhere.

—Lord Scarsdale, father-in-law of Mrs. Curzon, nee Leiter, is the reverend rector of Kedleston, Eng., the "living" of which is one hundred and fifty pounds a year, when, as a London paper says, "it is not affected by agricultural depression." The clerical nobleman is a broad-minded, genial old gentleman of the kind English novelists so frequently describe.

—Prince Nicholas, of Montenegro, has married off two of his daughters, but has three more on his hands for whom he can find no husbands, and two more are growing up. The girls are handsome and accomplished, but they belong to the Greek Orthodox church and must marry into royal families. The crown prince is twenty-four, and it seems equally difficult to find a wife for him.

—Abbe Rambaud has received the $9,000 D'Audriffet prize for self-abnegation from the French academy. He became blind early in life and found difficulty in getting ordained, but devoted himself and his fortune of $80,000 a year to relieving the poor of Lyons. He established schools for the street children, and a lodging house for aged people, with 500 dwellings where they are helped with work.

—Lady Mary Hamilton-Douglas, the eleven-year-old daughter of the late duke of Hamilton, will be one of the richest heiresses of the age. Her father could not leave her his titles, but left her the bulk of his property, including the isle of Arran, which is larger than the isle of Wight. Her income now is eight hundred thousand dollars a year, and will be a million and a quarter by the time she comes of age.

"A LITTLE NONSENSE."

—"Don't you know, prisoner, that it's very wrong to steal a pig." "I do now, your honor. They make such a row."—Tit-Bits.

—Binks—"What's the greatest feat you ever saw?" Jinks—"Trilby's." (Biff! Bang! Verdict: Justifiable homicide).—Town Topics.

—My landlady's daughter has a wheel.
And down the street she flies.
Meanwhile the dear old girl herself
Gives us pneumatic pies.
—Cincinnati Tribune.

—In languid summer when each tree
In lazy cadence rustles,
The blithe mosquito seems to be
The only thing that hustles.
—Washington Star.

—Teacher—"Frankie Fizzletop, you were late this morning." Frankie Fizzletop—"Yes'm. We've got a new baby at our house." Teacher—"Well, don't let it happen again."—N. Y. World.

—Madame—"I have been charmed with your visit, baron. I shall forever lead a good life that I may have the pleasure of meeting you again hereafter." The Baron—"My dear madame, do not, I pray you, be too good."—Illustrated Bits.

—Young Chip (who is just recovering from a bicycle experience)—"Pa, did the martyrs of the middle ages ride bicycles?" Old Block—"Why, no; what gave you that idea?" Young Chip—"Well, I read about so many of 'em getting broken on the wheel."—Town Topics.

—"I feed you, didn't I?" said the guest who had waited long and patiently for his dinner. "Yessah." "Well, you feed me. What I want is a little reciprocity." The waiter looked at him mournfully, and then murmured: "I'se sorry, boss, but I'se afraid we's jes' out ob dat."—Philadelphia Evening Telegraph.

—The judge—"Have you any reason to offer why sentence should not be pronounced upon you?" The prisoner—"I ain't got much to say, but it's right to the point. When I shot the feller, I was only doin' it fer fun; an' here you fellers are wantin' to hang me in cold-blooded malice, so you air."—Indianapolis Journal.

—After a moment the sexton, a short, bony individual, tiptoed to the church-door and looked anxiously up and down the street. There was no one in sight except the innocent, harmless, ragged tramp. The sexton looked at him a moment and hesitated. Finally he went forward doubtfully and touched Weary Walker on the shoulder. "I beg your pardon," he said, timidly; "but would you mind coming inside for a few minutes? The minister wants to say: 'My dear brethren,' and there's only me in the church."—Boston Budget.